Date: Wed, 7 Apr 93 04:30:03 PDT
From: Packet-Radio Mailing List and Newsgroup <packet-radio@ucsd.edu>
Errors-To: Packet-Radio-Errors@UCSD.Edu
Reply-To: Packet-Radio@UCSD.Edu
Precedence: Bulk
Subject: Packet-Radio Digest V93 #90
To: packet-radio

Packet-Radio Digest   Wed, 7 Apr 93   Volume 93 : Issue   90

Today's Topics:

AA4RE BBS Beta Test Version 2.1F
Alinco DJ-120 mods ?
Baycom Help
Can BayCom save Monitor Window data?
CAPRA: NOSintro Book
CAPRA: TCP/IP Seminar
GE and Motorola Packet
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Kamterm 1.20 FTP site?
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MFJ 1270 to Yaesu FT470 - Help!
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Poor's man packet modem plan and diagrams for others packet modems
RADIX 95 encode/decode utilities (2 msgs)
RCA 2 Mtr. Rigs For Sale
Rich Man's Packet ... :-)
rsgb gb2rs news 4th april 1993

Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>
Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Packet-Radio Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 6 Apr 93 05:26:34 GMT
From: news-mail-gateway@ucsd.edu

Subject: AA4RE BBS Beta Test Version 2.1F
To: packet-radio@ucsd.edu

Another beta test version of the AA4RE BBS system is now available. For users with GOPHER, you can find it now in the Amateur Radio section of index.almaden.ibm.com. For those wanting to use FTP, I have sent the files to ucsd.edu and they will be available in the hamradio/packet/aa4re directory as soon as Brian transfers them there.

The files are compressed using PKZIP V1.1

```
BB21FC ZIP -- Doc, common utilities, etc
BB21FN ZIP -- "Real mode" DOS programs
BB21FP ZIP -- "Protected mode" DOS programs. Requires 286
              or better machine with minimum 2MB storage
BB21FL ZIP -- Library for BB21FP.ZIP (same as previous versions)
```

If you are using MBBIOS, you will also need version 3.8

Enjoy,

Roy, AA4RE

Date: 6 Apr 1993 16:03:06 -0500
From: swrinde!cs.utexas.edu!not-for-mail@network.UCSD.EDU
Subject: Alinco DJ-120 mods ?
To: packet-radio@ucsd.edu

Dear OM,

I have an Alinco DJ-120 VHF (144-146 MHz) tranceiver and I use it mainly for packet radio. The main problem is that I cannot disable the battery saver function, so I often lose packets. Does anyone out there know how to disable this function?

I would like also to use it with a transverter for 430-440 MHz and I have been told that it can be modified to cover 140-150 MHz. Does anyone know how to do it?

Please reply by e-mail, as I have no regular access to the Net-news, to the following address:

kkrallis@leon.nrcps.ariadne-t.gr

Thanks and 73

Costas SV1XV (ex G7AHN)

```
--
Dr. K. Krallis SV1XV
Athens, Greece (KM18UA)
E-Mail: kkrallis@leon.nrcps.ariadne-t.gr
Packet: SV1XV @ SV1IW.ATH.GRC.EU
```

Date: 5 Apr 93 09:14:35 GMT
From: pipex!marble.uknet.ac.uk!uknet!icsbelf!johna@uunet.uu.net
Subject: Baycom Help
To: packet-radio@ucsd.edu

Hi

I have recently built myself a Baycom modem, I had no trouble building the thing - but I cannot get it to work !

It will not key up my transmitter (an FT470) nor will it receive any data. I am fairly certain that the TCM3105 chip is decoding data OK as I can see the voltage change on the RXDATA pin of the TCM3105 with a multimeter. I am beginning to think that the signal levels it generates are not good enough for my PC to recognise as RS232 levels.

The PTT line on the RS232 port (RTS I think) is toggled when I attempt to TX but the FT470 does nothing. (The sam can be said for the two other rigs I have tried !).

One strange thing, when I plugged the modem straight into the back of my PC, into a 9 pin male socket, it keyed the TX for about 20 seconds and then stopped, but then refused to key it again. This may point to a cable problem ? The cable I was trying to use to connect the PC to the modem was a 25 pin female to a 9 pin male connector. Maybe someone can furnish me with the correct connections for this, allow I think it is just a normal RS232 cable that is required.

I hope someone can give me a clue as to what the problem is, or some test to try as I have tried everything I can think of.

```
--
 -----------------------------------------------------------------------------
 John Agnew,                  |      johna@icsbelf.co.uk
 ICS Computing Group Ltd,     |  ...!uknet!icsbelf!johna
 Belfast (Northern Ireland)   |  Gi6IRL@GB7TED.GBR.EU [44.131.15.11]
```

Date: 5 Apr 1993 20:18:12 GMT
From: sdd.hp.com!col.hp.com!dfk@network.UCSD.EDU
Subject: Can BayCom save Monitor Window data?
To: packet-radio@ucsd.edu

I have a home built BayCom modem/TNC and am using ver 1.5 software. There was a balloon lauch in Denver yesterday, and I was able monitor to the data from the balloon. However, I could not get the software to save the data from the monitor window to a file.

If I connect to a station, I can save all data sent from the station to a file using the Write command. But the balloon team did not want anybody connecting to the balloon packet, so I could not use this method.

There are Mcall and Mselect commands, but I couldn't seem to get these to work the way I thought they should. I assumed I could monitor only packets from the balloon, but instead, I got nothing (on the screen, or in a file).

Has anybody with a BayCom modem been able to monitor packets from a station, and store that info to a file?

Dave Kurth
N0UVR @ W0LKD.#SECO.CO.USA.NA
dfk@col.hp.com

Date: 5 Apr 93 00:53:28 GMT
From: news-mail-gateway@ucsd.edu
Subject: CAPRA: NOSintro Book
To: packet-radio@ucsd.edu

CAPRA - the Chicago Area Packet Radio Association has arranged to obtain a supply of Ian Wade, G3NRW's new TCP/IP primer - "NOSintro." Reviews of this book have been quite good.

This 356 page book is a hands-on tutorial with documentation regarding TCP/IP and NOS software version of this international standard as implemented for use with amateur packet radio operations.

An earlier posting listed all of the 35 chapters of the book which outline the basics and more advanced topics of TCP/IP; there are 6 Appendices with additional reference materials and information. The book has over 80 detailed diagrams with "countless examples of commands and screen displays".

The books will be shipped via U.S. Postal Service's 2nd Day Priority Mail service upon receipt here in suburban Chicago.

Ian Wade, the author, has given us a discount for our quantity purchase. The cost to you will be slightly under the total cost which you would have were ordering directly from the publisher in the U.K.

This is NOT a money making undertaking on the part of our group. Many of us are active on TCP/IP and feel that this is a way to increase the awareness of and technical expertise of others who may be interested in or who are currently using the protocol in amateur radio circles.

Send your complete mailing address, a telephone number at which you can be reached should there be a problem, and a check/money order made out to CAPRA in the amount of $22.50. Canadian hams should send $24.00 in the form of a Canada POST International Money Order payable in U.S. dollars.

CAPRA - Chicago Area Packet Radio Association
Post Office Box 8251
Rolling Meadows, Illinois 60008

73 de Jim, N9GBH
CAPRA - Vice President

jchesner@holonet.net   70040.125@compuserve.com
(708) 253-0046 in Mt. Prospect, Illinois (NW Suburban Chicago)

Date: 5 Apr 93 00:53:29 GMT
From: news-mail-gateway@ucsd.edu
Subject: CAPRA: TCP/IP Seminar
To: packet-radio@ucsd.edu

CAPRA - (Chicago Area Packet Radio Association)
Presents: TCP/IP - Seminar/Workshop

The interest in TCP/IP (Transmission Control Protocol/Internet Protocol) in the radio amateur community has been increasing rapidly in the past year or two. Unlike regular AX.25 packet, TCP/IP is somewhat complex to set up and operate. More than with any new mode, there seem to be many people frustrated in their attempts to get started. As an aid to those interested in TCP/IP, CAPRA will conduct a hands-on, seminar and workshop.

TCP/IP is used extensively in telecommunications networking in government, educational, and corporate organizations. It includes several capabilities including unattended electronic mail exchange, retrieval/forwarding of files of information, software, and other materials to/from several hundred thousand computer systems throughout the world, incorporating hundreds of gigabytes (billions!) - pieces of information of all kinds, and, connectivity which allows authorized users to "operate" computer systems at distant points.

As implemented in the amateur community today, there are gateways to/from the amateur packet networks to the Internet (world-wide computer system networks), as well as to far distant amateur packet radio networks throughout North America, Europe, Australia and other points. Some, but not all of the capabilities of the amateur networks can be used with the AX.25 protocol; however, TCP/IP is "richer" and has greater capabilities to allow one to "reach out" to other amateurs and varied resources through the world as indicated above.

The seminar/workshop will:
- introduce you to the "basics" of TCP/IP
- introduce the amateur radio packet software package -- NOS
- explain the hardware requirements for using TCP/IP
- provide demonstrations via "hands-on" stations for your use at the workshop
- allow you to "prepare" a personalized copy of NOS for installation at your own station QTH
- discuss the backbone network in Metropolitan Chicago including links into the Internet
- answer questions, questions, questions...

When: Saturday, May 15, 1993
8:00 AM - Doors Open
8:30 AM - First Session
12 Noon - Presentation Conclusion
12 Noon - 1:00 PM - Lunch
1:00 PM until ??? - Discussion, Hands On, Prepare NOS Disks, Questions

Where: Harper Community College in Palatine, Illinois
(NW Suburban Chicago)(Algonquin and Roselle Roads)
Building H. Free Parking in Lot C.

Other:

- A brief written tutorial on TCP/IP is being prepared; if you are not familiar with the topic, you are urged to obtain a copy for review prior to the seminar/workshop. Please send $2.00 to the CAPRA Post Office Box prior to May 1, 1993.

- If you plan on preparing a personalize copy of NOS for your station, bring the appropriate MS-DOS or MAC diskettes (minimum 3, just in case)

Contact: Contact: Jim Chesner, N9GBH (708) 253-0046 n9gbh@kb9dip.il or Bob Van Valzah, KE9YQ (708) 690-2282 bob@ke9yq.ampr.org if you have questions.

CAPRA
Post Office Box 8251
Rolling Meadows, Illinois 60008-8251

NOTE: R.S.V.P.

Those wishing "hands on" assistance with equipment must reply; first come - first served.

Date: 6 Apr 1993 11:01:34 GMT
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!cleveland.Freenet.Edu!bj368@network.UCSD.EDU
Subject: GE and Motorola Packet
To: packet-radio@ucsd.edu

I just read an article in a magazine from Silicon Valley
California that says GE is mass producing a portable
laptop or notebook system with a built in packet system
which connects to an already existing national relay
system (I forget the name).
I wonder if this is perhaps restricted to the larger
cities for operation.
Anyway the article goes on to say that one way, that is
reception only packet built into to light weight
notebook computers will be the next wave to come out
soon, so that one can have complete Compuserve, etc.
wherever without phone hookups, etc.
This may be old news for this group, but it looks like
the big companies may be grabbing this packet stuff
after all.

--
Sir, I admit your gen'ral rule
That every poet is a fool;

But you yourself may serve to show it,
That every fool is not a poet.   A. Pope

Date: Sat, 03 Apr 93 09:26:46 PST
From: usc!wupost!darwin.sura.net!sgiblab!wattres!grafex!news@network.UCSD.EDU
Subject: HAM-server INFO file
To: packet-radio@ucsd.edu

All you might ever want to know about the KA6ETB HAM-server

Hardware:

386/25 PC clone
Telebit QBlazer modem
10-Meg file space reserverd for archive

Software:

Waffle 1.65
WFSmail 2.03

General Information:

Orders for files are filled between the hours of 0100-0600 daily. This is so those hosts through which the traffic is forwarded are not overloaded. Since we all depend on the generosity of others to carry the mail, it behooves us not to make them angry.

ASCII (text) files are split at about 30,000 bytes or 700 lines (which ever comes first). UUENCODED binary files are split at about 750 lines.

If you are using a PC and you do not have UUDECODE, follow these steps:

1. Order UUDECODE.BAS or UUDECODE.C, and UUEXE515.ZIP.
2. Compile UUDECODE.BAS or UUDECODE.C on your system.
3. Use the resulting executable to UUDECODE UUEXE515.ZIP. UUEXE515 has documentation about UUENCODE/UUDECODE.

You are all set to start ordering binary files from HAM-server.

/hamradio/newfiles/ contains files that have not yet been categorized.

If you order a file and do not get it, check the index to be sure you have spelled the file name correctly. If you have ordered the file correctly, then order a new INDEX, as I may have moved the file to a different directory. The system is still expanding, and I am trying to keep it in managable chunks.

A new INDEX is automatically generated every Sunday.

New files are being added and old files are being changed and updated. You might want to send a order for NEWFILES <date> from time to time, to see what's new. <date> has the form of MM-DD-YY and is required.

Ordering Information:

Send an email to:

    HAM-server@GRAFex.Cupertino.CA.US

In the text of the message, place:

```
HELP
INDEX
GET /hamradio/00-INDEX.TXT
```

HELP will send you the HAM-server HELP file. This is processed immediately for return delivery.

INDEX will send you an index of the files and the directory they are in. 00-INDEX.TXT is a description of most of the files in INDEX. This file is in a continual state of flux, therefore many of the file names listed therein may not match INDEX, but you can figure it out.

Some Reasons Why Ordered Files Are Not Received:

1. Your return path is incorrect. My bounce mailbox fills up quite regularly with messages. And, since the path is incorrect, I cannot contact you to let you know.

2. You have spelled the file name incorrectly. Use the file names listed in the INDEX, rather than 00-INDEX.TXT. The later is only a guide.

3. The file name has changed since the INDEX was generated. Order a new INDEX.

4. Your order was sent to KA6ETB@GRAFex.Cupertino.CA.US, instead of HAM-server@GRAFex.Cupertino.CA.US. File requests sent to me

```
     will not be honored (naturally).

--EOF

------------------------------

Date: 6 Apr 93 12:30:30 GMT
From: news-mail-gateway@ucsd.edu
Subject: HELP
To: packet-radio@ucsd.edu

HELP

---------------------------------------------------------------------------
IPTEH  *  44.72.201.65  *  144.93Mhz  *  Carlinville IL  *  39.35N  89.97W

------------------------------

Date: 5 Apr 93 03:55:18 GMT
From: sdd.hp.com!saimiri.primate.wisc.edu!copper!mercury.cair.du.edu!
diana.cair.du.edu!awinterb@network.UCSD.EDU
Subject: Kamterm 1.20 FTP site?
To: packet-radio@ucsd.edu

I am posting this for a friend who doesn't have Internet access.  Please
respond to me if you know of the site where I could ftp this file for him.
Thank you...Art, N0OQS

The program is called Kamterm.  The archived file for the version I already
have (v1.0) is KMTRM100.zip.  My guess would be that the archive for the
newer version would be called KMTRM120.zip, if whoever is putting the
archive together follows the same format, at least! The program is a Host
Mode terminal program for the Kantronics tnc's.
--
Art Winterbauer  N0OQS
Internet:  awinterb@du.edu OR awinterb@diana.cair.du.edu
Packet:    n0oqs @ w0gvt.#neco.co.usa

------------------------------

Date: 5 Apr 93 22:40:17 -0600
From: access.usask.ca!kakwa.ucs.ualberta.ca!acs.ucalgary.ca!cgate.sait.ab.ca!
wridgewell@decwrl.dec.com
Subject: Majid... Delco... PMP Help
To: packet-radio@ucsd.edu

In article <dep.733008678@siemens.com>, dep@scr.siemens.com (David Post) writes:
> Hi
```

>
> I am having trouble finding a circuit diagram and a parts
> list for the poor mans packet (PMP). Does anyone know where I can
> find this?
>
> Thanks in advance
>
> Dave Post
> WA2QIK
> dep@siemens.com
>

Survey says....
73 Magazine
August 1991
Page 10

Hope you can find a copy Dave
73's

```
Walter Ridgewell, Systems and Networks Administrator
Computer Services Department  ______________________________________
Medicine Hat College          |  Internet: Ridgewell@ACD.MHC.AB.CA |
299 College Drive S.E.        |  Compuserve: 76666,2403            |
Medicine Hat, Alberta         |  Packet: VE6CQL@VE6FRM.AB.CA       |
Canada T1A-3Y6                |  Fax: (403) 529-2437               |
                              |  Phone: (403) 529-3807             |
                              --------------------------------------
```

"It is better to play than do nothing."   Confucius

Date: Sun, 4 Apr 1993 13:16:29 GMT
From: usc!wupost!darwin.sura.net!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU
Subject: MFJ 1270 to Yaesu FT470 - Help!
To: packet-radio@ucsd.edu

In article <1993Apr4.035110.16109@cactus.org> galew_a@cactus.org (Andy Galewsky)
writes:
>
>Hi,
>   I will try to keep from showing my frustration - but I recently bought
>an MFJ 1270 and I am definitely not having fun yet. I am trying to get it to
>work with my Yaesu FT470. I can recieve information just fine. I can connect
>to myself after installing jumper 10 (digital loopback). I just cant get it
>to key the xmitter. I have read the manual about JMP K. (Why oh Why did they
>not put a jumper block for JMP K? - Why didn't they label the soldered over
>holes for the jumper better?). The first bad thing I did was put a jumper into
>the two holes indicated by the JMP K label on the PC board. Wrong!! I have

>fixed that and put a jumper where JMP K really is. I still get no PTT. I have
>measured the resistance when the PTT light is on and I get ~47K ohms.
>Is this going to work with my Yaesu? Someone told me that the resistance
>between the MIC pin and ground should be < 10K ohms before the radio will key
>the xmitter. Is this correct? Do I need to change resistor 107? What value?
>
>So far I am really not impressed with the documentation for my TNC. Would
>it really have raised the cost of the TNC that much to have put a jumper block
>for JMP K - what if I want to use two radios? Can anyone point me to an FAQ
>or other written material regarding interfacing MFJ 1270's and Yaesu HTs?
>
>   Thanks
>   -Dan Galewsky N5ZEH
>   dan@crs.com

Ok, let's take a deep breath and start again. This isn't rocket science.
The first thing to do is put the TNC back the way it came from the factory.
You should need to make *no* changes to the TNC to work with a FT470.
Now you should measure near zero ohms (<100) from pin 3 of the DIN connector
to ground, pin 2, when the PTT light is on. This is a VMOS FET you're
measuring, and it has a zener across it to protect it. If you're using
a digital multimeter, you may need to use the diode test range to get
a reading because your meter may not put out enough voltage in ordinary
ohms range. Observe polarity. Since the PTT LED is working, we know the
PTT signal is getting to the gate of the FET.

Don't be fooled by the DIN connector. The pin order is not sequential.
It looks like this:

```
     3    1
       5   4
         2
```

As a last resort, try a 1k resistor, an LED, and a 9 volt battery for
the test. The LED should light during PTT if you have the polarity right.
If all tests fail, and you can't get a near short indication when PTT
is on, your VN10KM switching FET is bad. Radio Shack carries them, or
you can send the TNC back for warranty repair.

Now assuming you *do* get proper switching action at pin 3 of the DIN,
you're ready to build the interface to the FT470. There are basically
two ways to do this. Here's the way I like to do it:

```
TNC PTT(3)-------))))))))))))------------> microphone tip
                 ============
TNC AF OUT(4)----))))))))))))----X--------> radio sleeve (gnd)
```

```
                                 |
TNC GND(2)-----------------------|

TNC AF IN(4)------------------------------> earphone tip
```

You can rip a suitable transformer out of an old transistor radio or buy one from Radio Shack. A 600:600 interstage is great, but almost any audio transformer can be made to work. I usually heatshrink the tiny transformer into the cable assembly. This circuit will work with Icom and Yaesu HTs.

Here's another way to do it:

```
                         R
TNC PTT--------------/\/\/\/\/\----x---------> microphone tip
                                   |
TNC AF OUT-------------------------|

TNC GND--------------------------------------> sleeve

TNC AF IN------------------------------------> earphone tip
```

For Icom radios, use 10k for R, for Yaesu radios, use 2.2k for R. It's not necessary to put a capacitor in series with TNC AF out since there is one already present inside the TNC.

Now all you have to do is adjust the audio level pot in the TNC to give you 3 kHz deviation and you're ready to play packet.

Gary

```
--
Gary Coffman KE4ZV           |    You make it,     | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems |    we break it.     | uunet!rsiatl!ke4zv!gary
534 Shannon Way              |    Guaranteed!      | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244     |                      |
```

Date: Tue, 6 Apr 93 00:27:39 GMT
From: noc.near.net!oz.plymouth.edu!m_ander@uunet.uu.net
Subject: NEDA Hexipus' 2N2222 Transistors
To: packet-radio@ucsd.edu

I'm looking for the transistors needed for the Hexipus, and am having trouble finding them: Radio Shack doesn't have them and can't get them (or so they say). Any ideas of where I might get my hands on some (say, four)?

Please e-mail any response. Thanks in advance.

-Mike
m_ander@oz.plymouth.edu

Date: 4 Apr 93 14:26:57 GMT
From: sun-barr!sh.wide!wnoc-tyo-news!glocom!tyo-noc-news!jh1ynw!marina!kohjin@ames.arpa
Subject: NOS Converse Server on 4.3BSD?
To: packet-radio@ucsd.edu

In article <1993Mar25.032249.9245@sserve.cc.adfa.oz.au> wkt@csadfa.cs.adfa.oz.au (Warren Toomey) writes:

```
 |Can anybody tell me if the converse service available under newer versions
 |of NOS has been ported to 4.3BSD as a standalone program, and if so where
 |I can pick up the source code for it.
 |
 |Many thanks,
 |
 |   Warren vk1xwt
```

Try ucsd.edu /hamradio/packet/tcpip/incoming:
wampes-930402.tar.Z

wampes-930305 compiles and runs on Sun4 IPC SunOS 4.1.1B.

Good luck,
 Kohjin

```
--
    *----/----*    Kohjin Yamada, JR1EDE   [kohjin@marina.prug.or.jp]
  Q-----T------H   504-55 Shimo-Yamaguchi, Hayama, Miura, Kanagawa, Japan
*------/|-------*  Phone:+81-468-75-6750   Fax/Modem/Voice:+81-468-76-1176
```

Date: Mon, 29 Mar 1993 11:32:33 GMT
From: pipex!sunic!aun.uninett.no!nuug!swing!ddm3!magne@uunet.uu.net
Subject: Packet Radio via CB????
To: packet-radio@ucsd.edu

Peter Busser (peterbu@sci.kun.nl) wrote:
: In <1993Mar20.152529.17081@ke4zv.uucp> gary@ke4zv.uucp (Gary Coffman) writes:

: >to allow a CB type service. Also note that the orginal poster is not
: >in the US and so is not subject to US regulations.

: That's right. And as far as I know the CB regulations in Europe come from the
: CEPT.

That is correct. The CEPT regulations for CB, which are enforced over most of Europe, says that you will have to use FM and a maximum power of 4 watts. The use of AM, SSB and other modes are subject to national regulations (in Norway, only for equipment bought before, say 1985, and with a max. power output of 0.5 W)

: Greetings,
: Peter Busser

73 de Magne   la1bfa   magne@statoil.no

Date: Tue, 06 Apr 93 09:01:19 PDT
From: tandem!UB.com!grafex!ka6etb@uunet.uu.net
Subject: Plan the next generation BBS
To: packet-radio@ucsd.edu

With permission of N0ARY, I pass along the following for your perusal:

Date: Mon, 15 Mar 93 23:53:27 PST
From: bob (Robert Arasmith)
To: users%allcan@bbs.Arasmith.COM

Enough talk, time to get started. We are undertaking what I envision as the next generation of BBS. It offloads a lot of the user interface and work to the users pc as opposed to the BBS itself. This is often described as the client/server approach.

A short example will show you what I mean...

You are running the client code on your pc. When you log into the bbs you are recognized as being a bbs client as opposed to a standard user. The bbs would then send the output of the LIST NEW command in a compressed binary form. The software on your pc will decode this info and display the listing to you in a scrolling window.

You could then scroll through with your mouse or arrow keys and tag messages you wish to read. As you tag them your pc will make a request of the bbs for that message. The message would be again transferred in a compressed form. By the time you have tagged all the messages you wish to read you will already have a few of them back from the BBS.

You can read them while the remainder are fetched from the BBS.

As for sending a replying to messages. The software on your pc will take care of most of the work. Allowing you do use screen editing to correct mistakes, import files, etc. When you have it just right your pc would ship it compressed to the bbs. All subsequent list requests would be handled in a similar fashion.

So what do we gain? First, things run much smoother and faster from the users point of view. The listing of messages will be occurring locally. You'll be able to scan forward and back through the list tagging what you want to read. The client will be issuing read requests in background. Things will seem to occur almost instantly from the users point of view.

Channel usage will benefit. Rather than sending formatted text to the user, the BBS will be shipping binary structures. Taking far less space. Not only that but the need to issue re-reads and re-lists will be a thing of the past. Once you have gotten a listing or read a message it is on your machine. A re-read is handled totally on your computer.

This is just the most obvious example. Since the BBS will be communicating to a program on your end all transfers can be short. No longer will the bbs be leading you through commands at 1200 baud. Most of this will be handled locally, at the client.

Want to get involved? Well the N0ARY bbs will be capable of this mode of operation in a matter of weeks. We have two hams lined up already to lay down some code. For the mac, Jim Van Peursem (KE0PH) the author of Savant a mac packet program, and for the pc under dos we have Gary Mitchell (WB6YRU). If you have a desire to join us in this endeavor please send me a message. We need a windows expert and someone for the other computers commonly found connected to tncs. Send me a message and I will send you the binary specification.

The bbs is also available if you want to setup a bbs/server in your area. Send me a message and I will send you some information on what the bbs has to offer besides what is discussed here.

73, bob
    n0ary@n0ary.#nocal.ca.usa.na
    bob@arasmith.com

Date: 4 Apr 93 19:57:14 GMT
From: news-mail-gateway@ucsd.edu
Subject: Poor's man packet modem plan and diagrams for others packet modems

To: packet-radio@ucsd.edu

Hi,

I don't have 73's release about Poor's man packet TNC. Could someone
send me plans, diagrams to build the modem.
I search others plans, diagrams about simples modems to be connected with
a Macintosh with SoftKiss.
I need informations about the maximum rate of TX with softkiss.

If possible, send plans in GIF, Pict or TIFF. (Binhexed if possible).

Many thanks.

Pascal Beaujeant.
Computing Center
F.U.N.D.P.
Belgium

Date: 3 Apr 93 07:00:48 GMT
From: ogicse!uwm.edu!zaphod.mps.ohio-state.edu!usc!elroy.jpl.nasa.gov!nntp-server.caltech.edu!mhs@network.UCSD.EDU
Subject: RADIX 95 encode/decode utilities
To: packet-radio@ucsd.edu

Does anyone out there know if there is an FTPable copy (ies) of
the radix 95 encoding and decoding utilities somewhere in netland?
I have tried archie, but no luck. Please reply by e-mail to the address
below. Thanks, es 73's

```
Mike Stockett, wa7dyx              | Tel:       + 1.818.306.6164
Mail Code:  525-3660               |
Jet Propulsion Laboratory          | Fax:       + 1.818.306.6912
4800 Oak Grove Drive               |
Pasadena, California  91109        | Internet:  mhs@cco.caltech.edu
```

Date: 6 Apr 93 12:09:41 GMT
From: pipex!marble.uknet.ac.uk!uknet!nessie!goshawk!john@uunet.uu.net
Subject: RADIX 95 encode/decode utilities
To: packet-radio@ucsd.edu

In article <1pjcn0INN6mv@gap.caltech.edu>, mhs@cco.caltech.edu (Michael H.
Stockett) writes:

|>
|> Does anyone out there know if there is an FTPable copy (ies) of
|> the radix 95 encoding and decoding utilities somewhere in netland?
|> I have tried archie, but no luck. Please reply by e-mail to the address
|> below. Thanks, es 73's
|>

I did a search on Archie for R95 and r95 and came up with several sites with the Radix 95 software.

John
--

John Heaton   -   NRS Central Administrator
MCC Network Unit, The University, Oxford Road, Manchester, M13-9PL
Phone: (+44) 61 275 6011   -   FAX: (+44) 61 275 6040
Packet: G1YYH @ G1YYH.GB7PWY.#16.GBR.EU

Date: 5 Apr 1993 06:17:04 -0500
From: usc!cs.utexas.edu!not-for-mail@network.UCSD.EDU
Subject: RCA 2 Mtr. Rigs For Sale
To: packet-radio@ucsd.edu

I have some RCA TAC-200 VHF mobile rigs for sale which are perfect for packet operation, repeater construction or other non-frequency-agile use.
You have to change several capacitors on the exciter board and 4 on the receiver board to bring them down to 2 meters (they were 150-165 MHz) but I've put together a kit of all the capacitors you'll need and complete instructions, with pictorials, on how to effect these modificatons. Control cables, control head, microphone and schematics are included (I don't have speakers for them, but any 4-8 ohm will do fine). One transmit and one receive channel element will be included. You can get crystals for about $11 each for these.
Channel elements can usually be found at swap meets, etc. or they can be purchased from Bomar or other crystal companies. I've reverse engineered a receive channel kit (without the nice socket to plug it in or the cover) that I can supply for $7.50 each (no crystal) while supplies last.
I still haven't identified a couple of parts on the transmitter channel element but I hope to be able to supply them for $10.00 each in the near future. Physically, the trunk mount unit is about 12"x24"x4". Total weight is 35 pounds packed for UPS shipment. Some units may have bent or broken cooling fins on the trunk unit, but I've tested all of them at the 163.065 MHz frequency and can guarantee they work. I want $70 each, plus shipping ($15 will send one UPS most anywhere in the contiguous USA). I use a 12 volt 10 amp battery charger with a large (54,000 mfd, 40 volt!) capacitor with a total cost of less than $30 which works fine as a power supply.
Email me at:
chideste@cyanamid.com

73
Dale

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-----------------------------------------------------------------------
Dale H. Chidester, PhD           N3HAL      "Against stupidity, even the
American Cyanamid Company                    Gods in vain doth contend."
Agricultural Research Divison                                   Schiller
PO Box 400,  Clarksville Rd.     Phone: (609) 799-0400 x2430
Princeton, NJ  08543-0400        Email: chideste@cyanamid.com
-----------------------------------------------------------------------
```

Date: 5 Apr 93 23:42:45 GMT
From: psinntp!bacon!jordan@uunet.uu.net
Subject: Rich Man's Packet ... :-)
To: packet-radio@ucsd.edu

There are a lot of messages in this group about doing packet "on the cheap" but what about at the other end of the spectrum? If the goal is to get mobile (say, 60MPH on the freeway) IP connectivity or X Windows support (a la X Remote, etc.), what's the best I can do these days? One suggestion has been to use a CellBlazer and run PPP, which obviously doesn't use packet. What's the high end in packet these days?

Thanks,

/jordan

Date: 3 Apr 93 07:20:58 GMT
From: cs.ubc.ca!unixg.ubc.ca!kakwa.ucs.ualberta.ca!ersys!adec23!ve6mgs!rec-radio-info@beaver.cs.washington.edu
Subject: rsgb gb2rs news 4th april 1993
To: packet-radio@ucsd.edu

Good morning. It's Sunday the 4th of April and here is the GB2RS news broadcast, prepared by the Radio Society of Great Britain.

First the headlines:- 18MHz-band intruders have been removed by RSGB; there are two new RSGB committee chairmen; and we have urgent news for Top band ARDF enthusiasts.

The RSGB's Monitoring System, otherwise known as the Intruder Watch, has had four recent successes which have been of benefit to all radio amateurs. An Argentinian fax, naval data and two diplomatic stations have been removed from the 18MHz band with the assistance of the Radiocommunications Agency. Brief details of the role of the Monitoring System can be found on page 78 of the RSGB Call Book and a fuller description is in the December 1992 edition of Radio Communication. The Coordinator of this RSGB service is David Owen, G0OES.

The RSGB Microwave Committee has a new chairman. He is Steve Davies, G4KNZ. The previous Chairman, Mike Dixon, G3PFR, become the Microwave Manager. The RSGB Planning Advisory Committee also has a new chairman. He is Geoff Bond, G4GJB. Details of the Society's other office-holders can be found in the April edition of RadCom.

The RSGB'93 Show takes place on Sunday the 16th of May at the National Exhibition Centre, near Birmingham. There will be the usual trade stands in a single huge hall, plus a large display of the work of RSGB Headquarters and of the Society's committees. The National Vintage Communications Fair is also being held that day in the NEC complex. Many visitors will wish to visit both shows and reduced rates are available for this.

Next details of two ARDF event which, unfortunately have not appeared in Radio Communication. The Top Band Amateur Radio Direction Finding contest for the Geoff Peck Memorial Trophy take place today Sunday the 4th at Cowleaze Wood, Stokenchurch, at NGR 727 958. Competitors need Map 165, Aylesbury and Leighton Buzzard. Competitors should assemble at 13.00 for a 13.20 start. The next Top Band ARDF is the Slade Qualifying Event which is scheduled for Sunday the 18th of April. The venue is the Industrial Estate, 2 kilometres East of Bridgenorth at NGR 739 927 found on Map 138, Kidderminster and Wyre Forest. Competitors should assemble at 13.00, to start at 13.20. Competitors requiring tea should notify John Drakeley on 021 772 2278 (work) or 021 770 3474 (home), no later than Sunday the 11th of April.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DYO.

Date: Mon, 5 Apr 93 15:58:59 GMT
From: cs.ubc.ca!unixg.ubc.ca!kakwa.ucs.ualberta.ca!alberta!adec23!mark@beaver.cs.washington.edu
To: packet-radio@ucsd.edu

References <C4ECM9.2pv@hpuerca.atl.hp.com>, <96JG039Oce2q00@amdahl.uts.amdahl.com>, <C4q29A.Gzu@hpuerca.atl.hp.com>
Subject : Re: RFD: reorganization of rec.radio.amateur

edh@hpuerca.atl.hp.com (Ed Humphries) writes:

>In <96JG039Oce2q00@amdahl.uts.amdahl.com> ikluft@uts.amdahl.com (Ian Kluft)
writes:
>>>>rec.radio.amateur.digital.misc   packet radio & other digital modes
>>>>rec.radio.amateur.digital.tcp-ip TCP/IP via packet radio

>>>If you _must_ sub-divide, please do not sub-sub-divide!
>>>Just leave it at r.r.a.digital to better describe the group.

>>This was proposed by users of rec.radio.amateur.packet. Do you use that
>>newsgroup regularly? They thought TCP/IP was indeed its own topic.

>I have posted to r.r.a.p and read it when I see a topic of interest.
>My objection is relative to the next level down hierarchy: you propose
>r.r.a.* EXCEPT for digital, which you propose to subdivide. _If_ tcp/ip
>is a big enough topic, _then_ it deserves the same level as the other
>topics, i.e. make it r.r.a.tcp-ip and r.r.a.digital (or digi-misc if
>you must).

Well, if you propose to put them at the same level, then you have
r.r.a.tcp-ip and r.r.a.packet. I feel that there is going to be some
confusion on which to post to since tcp-ip is another packet mode.

There was an interest in including other digital modes, AMTOR, PACTOR,
RTTY (Ughh) into a separate group. Thus the proposal of r.r.a.digital
to replace r.r.a.packet. However, water and oil describe how the
AX.25 and the TCP/IP community get along, and I am sure that the
AMTOR enthusiasts will not be met with open arms into the former
.packet group (my guess, not MY opinion). I *might* suggest that
it be better to split it into three sub groups:
     rec.radio.amateur.digital.misc   < include all other modes >
     rec.radio.amateur.digital.tcp-ip
     rec.radio.amateur.digital.ax25   < replace .packet >
but I feel kind of silly suggesting that since it is r.r.a.misc that is
overloaded, not r.r.a.packet (yet)

If you want my opinion, I like Ian's proposal since it allows the
tcp-ip'ers to get out of the closet, and volume be-damned (I think there
is going to be enough volume non-the-less) and clearly suggests that
`modes digital' are discussed and allows for furthur expansion in the
digital groups. Up one heirarchy, parallel to .digital/.packet and it
starts loosing it's meaning (tcp-ip IS .packet, and IS .digital).

Ciao -- Mark

Date: 5 Apr 93 04:53:51 GMT
From: munnari.oz.au!metro!mippet.ci.com.au!eram!dave@network.UCSD.EDU
To: packet-radio@ucsd.edu

References <1993Mar30.162731.6508@ke4zv.uucp>, <1pa94j$2i5@agate.berkeley.edu>,
<1993Mar30.231415.4447@qualcomm.com>
Subject : Re: Using UNIX & packet?

In article <1993Mar30.231415.4447@qualcomm.com>,
karn@servo.qualcomm.com (Phil Karn) writes:

| network outages, without having to rely on keepalives ("makedeads") to

I've often wondered why they are called "keepalives" when they seem to have the opposite effect :-)

```
--
Dave Horsfall (VK2KFU)    VK2KFU @ VK2RWI.NSW.AUS.OC     PGP 2.2
dave@esi.COM.AU           ...munnari!esi.COM.AU!dave    available
```

Date: (null)
From: (null)
Saturday the 10th of April. Check these frequencies: for CW 1832, 3505, 7005, 10105, 14020, 18075, 21020, 24900, 28020kHz and for SSB 1840, 3645, 3775, 3795, 7045, 7080, 14195, 18125, 21295, 24940, 28395kHz, RTTY 14090, 21090, 28090kHz From Liberia, F6FYD holds the call sign EL2YD and will be intermittently on the air until the end of 1993. From Liechtenstein, HB9BCK will be active as HB0/HB9BCK from Sunday the 11th until Saturday the 17th of April. From Kampuchea, F1MXQ will be active as XU5SE from now until mid-June.

Date: (null)
From: (null)
Rally news now, and we know of two events for today, Sunday the 4th.

The Launceston Amateur Radio Rally is being held at the Launceston College in Cornwall. Doors open at 10.30am. There are the usual traders, a large bring & buy stall in two large halls. Hot snacks and refreshments are available and talk-in is on channel S22.

The White Rose Amateur Radio Society Radio Rally is being held at the Allerton High School, Kings Lane, Leeds 17. Doors open at 11.00am. 10.15am for disabled visitors. There are the usual trade stands, an RSGB stand and a bring & buy stall. Refreshments are available.

We know of no scheduled event for the Easter Weekend, Friday the 9th to Monday the 12th.

Contest news next:

The first of the RSGB Slow CW Cumulative Contests is tomorrow, Monday the 5th, from 1830 to 2000GMT, using 3.530 to 3.580MHz only. See March RadCom, page 81 for the rules which emphasise the importance of sending slowly during the event. The RSGB's first 1296/2320MHz Fixed Contest will take place on Sunday the 11th of April from 1600 to 2200GMT. See February's RadCom page 66 for the rules.

Special event Station GB2RN, operated by the Royal Naval Amateur Radio Society will be aired during Easter week. Activity starts on Saturday the 10th of April, and runs through to Sunday the 18th. Station is operated from the Bridge Wireless Office on HMS Belfast, located in the Upper Pool of London, between London and Tower Bridge. Check these frequencies: 1.970, 3.660, 3.740, 7.090, 14.190, 21.360 and 29.933MHz, CW and SSB as appropriate. Operation will also be on 2 metres FM and SSB. The local Packet Bulletin board will be GB7HSN, accessed on 2 metres.

Time to get your diaries out as we have news of the eighth AMSAT-UK Annual Colloquium which will be held from the 29th of July to the 1st of August at the usual venue, the University of Surrey. Anyone wishing to present a paper should submit an abstract no later than the 1st of May to: Doug Loughmiller G0SYX, Colloquium Programme Chairman, Centre for Satellite Engineering Research, University of Surrey, Guildford GU2 5XH. Booking forms for visitors to the Colloquium will be available from the 15th May. Requests for forms and any enquiries should go to: Ron Broadbent, Hon Sec AMSAT-UK, London E12 5EQ, enclosing a large self-addressed, stamped envelope.

And now the solar factual data

For the period 22nd to 28th March, magnetic storms seriously affected northern latitudes but were declining by the end of the period. Only one flare of any note was reported, an M2.3/SF on the 23rd. Otherwise only small B and C flares were reported. Sunspot counts have meaned about the 67s and solar flux levels have averaged 121 units hardly changing day to day. The geomagnetic Ap index was up to full storm levels of 47 units on the 24th, about K7, due to a mag storm starting at 21.55 hours on the 23rd, and though levels declined it remained unsettled up to the end of the period. The Ap average for the period was 23.2 units. The state has been mag storm at northern latitudes and 'Strat warm in final stage'. The radio quality indices have declined with the magnetic storm and were down to very poor on the 24th. The Stavanger circuits were almost useless, with Moscow and New York being only slightly better. Due to a mistake the aa indices were sent out for the wrong period, so are not to hand this week. The X-ray flux has been very low and averaged only B2.3, though the 24th was down to only B1.9. Levels were recovering as this bulletin was being prepared. Bartells rotation started on the second of April.

Now the ionospheric data for Central France:

Not all the data is to hand but the F2 daytime critical frequencies at Poitiers, as reported by Meudon, have declined considerably and averaged only about 8.4MHz. On the 24th it was only 6.1MHz due to the magnetic storm. The darkness hour lows were not affected so much, being about 3.0MHz. There has been periods of spread-F most days.

Now the ionospheric data for the north:

The F2 daytime critical frequencies at Ekaterinberg have declined. The daily highs averaged 8.2MHz and the darkness hour lows 3.2MHz. Solar cycle 22 is still giving us surprises, after month 77 it is recording the second highest mean level of solar flux, surpassed only by the highest cycle ever recorded, cycle 19. It is also higher than the mean level of all passed cycles at this time since solar flux has been measured.

And lastly the solar forecast:

This week, the most active side of the sun will be rotating away. Solar flux levels are expected to be about the 150s. Geomagnetic activity is expected to be unsettled due to the passage of coronal holes, and on the basis of history the radio quality indices are expected to be normal. MUFs are expected to reach 30MHz during the day on north/south circuits. Darkness hours are expected to reach about 18MHz. And that's the end of the solar information.

Finally in the main news, SSL has informed the Society that as of last Wednesday morning, the latest callsigns issued were in the G0 T J and G7 O T series, and Novice calls in the 2 0 A E and 2 1 B P series.

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

End of Packet-Radio Digest V93 #90
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